

Zero Defect Manufacturing for Circular Economy Programme

- Study plan -

UCD – Grenoble collaboration

General structure of the EIT-M Master Programme

Type of modules	Total credits for EIT-M Master	Total credits 1 st year	Total credits 2 nd year
Technical courses (TC)	45	40-50	10-20
Specialization courses (SC)	15		
Innovation & entrepreneurship courses (I&E)	30	10-20	10-20
Master thesis (MT)	30	0	30
Tot	120	60	60

Entry university UCD – exit university Grenoble INP

1st year - UCD

Type of modules	UCD courses	ECTS	Semester	Total credits
TC	Systems Analysis & Improvement (Core)	5	1	
	Manufacturing Engineering II (core)	5	1	
	Engineering Project Management - Tools & Techniques (core)	5	1	
	Eng. Decision Support Systems (core)	5	2	
	Operations Management (core)	5	2	
	Advanced Polymer Engineering (core)	5	2	
SC	Supply Chain Design & Analysis (core)	5	1	
	Mechanical Engineering Design I (core)	5	2	
I&E	Mechanical Engineering Design II (core)	5	1	
	Technical Communication (core)	5	1	
	Professional Eng. (Finance) (core)	5	2	
	Professional Engineering (Management) (core)	5	2	

2nd year - Grenoble INP

Type of modules	Grenoble courses	ECTS	Semester	Total credits
TC (mandatory)	AI for production systems	5	S3	15
	Smart analytics for big data	5	S3	
	Digital chain for industry 4.0, including VR and AR	5	S3	
SC (1 choice out of 2)	Sustainable manufacturing	6	S3	6
	Advanced LCA for production systems	6	S3	
I&E (the first two mandatory)	Centrally organized summer school	5		10
	Operational excellence in R&D	5	S3	
	Innovation challenge	0	S3	
MT	Master thesis (core)	30	S4	30

Recap

Type of modules	ECTS in S1	ECTS in S2	ECTS in S3	ECTS in S4	Total credits
TC	15	15	15		45
SC	5	5	6		16
I&E	10	10	10		30
MT				30	30
Total	30	30	31	30	121